

## PATENT ABSTRACTS

9/5/4 (Item 3 from file; 350) [Links](#)

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Derwent WPIX

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0015240190 & & Drawing available

WPI Acc no: 2005-590262/200560

Related WPI Acc No: 2005-504011

XRPX Acc No: N2005-484160

In-band network management method, involves constructing multi protocol label switching packet including Internet protocol with header field and packet data field, and inserting predetermined code of header field

Patent Assignee: BOODAGHIANS S (BOOD-I); AT & T CORP (AMTT)

Inventor: BOODAGHIANS S

Patent Family ( 2 patents, 1 & countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20050180422	A1	20050818	US 200589466	A	20000607	200560	B
			US 2005100735	A	20050407		
US 7424017	B2	20080909	US 200589466	A	20000607	200859	E
			US 2005100735	A	20050407		

Priority Applications (no., kind, date): US 2000589466 A 20000607; US 2005100735 A 20050407

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
					Continuation of application	US 200589466
US 20050180422	A1	EN	13	10	Continuation of application	US 200589466
US 7424017	B2	EN			Continuation of application	US 200589466
					Continuation of patent	US 6920133

Alerting Abstract US A1

NOVELTY - The method involves constructing a multi protocol label switching (MPLS) packet including Internet protocol (IP), with header field, and a packet data field. A predetermined code of header field differentiates between a packet and user packet. the constructed packet provided to the network. The network is an MPLS network and the code is inserted into a subfield that is used to supply a routing label.  
DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- a. a network comprising a router constructing an in band network management packet
- b. a router comprising reception circuitry that receives an incoming packet.

USE - Used for managing a digital communication network.

ADVANTAGE - The structure defined by the method ensures that the proposed multi protocol label switching (MPLS) operation, administration and maintenance (OA&M) framework will be able to support any client layer including internet protocol.

DESCRIPTION OF DRAWINGS - The drawing shows a flow diagram of an in-band network management packets (INMP) ID bit.

7/5/9 (Item 9 from file: 350)  
DIALOG(R)File 350: Derwent WPIX  
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0014096104 & & Drawing available

WPI Acc no: 2004-279801/200426

XRPX Acc No: N2004-221524

Data distribution progress monitoring method for computer network, involves updating progress distribution information and node status information in respective tables of distribution manager, based on data collected at node

Patent Assignee: INT BUSINESS MACHINES CORP (IBM)

Inventor: ACHTERMANN J M; GIAMMARIA A; SANCHEZ J C

Patent Family ( 1 patents, 1 & countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6704782	B1	20040309	US 1999458269	A	19991209	200426	B

Priority Applications (no., kind, date): US 1999458269 A 19991209

Patent Details					
Patent Number	Kind	Ln	Pgs	Draw	Filing Notes
US 6704782	B1	EN	23	5	

#### Alerting Abstract US B1

NOVELTY - An identifier is generated and routed to an end-user terminal through the network with a distribution manager. The distribution manager updates progress distribution information and node status information in a distribution state table and node state table respectively, by collecting the data describing status of end-user terminal, at the node, through the selected routing.

DESCRIPTION - An INDEPENDENT CLAIM is also included for computer network.

USE - For monitoring data distribution progress in computer network (claimed) such as local area network (LAN) or wide area network (WAN).

ADVANTAGE - Allows a system administrator or even an authorized end-point user, to monitor the status of data distribution in computer network for multiplicity of targets.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of exemplary computer networking system.

7/5/16 (Item 16 from file: 350)  
DIALOG(R)File 350: Derwent WPIX  
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**0013183087 & & Drawing available**

WPI Acc no: 2003-266537/200326

Related WPI Acc No: 2002-733264; 2002-741613; 2002-741622; 2002-751032; 2002-751033; 2003-198751; 2003-198764; 2003-198768; 2003-198770; 2003-198771; 2003-198772; 2003-198773; 2003-198775; 2003-198780; 2003-198936; 2003-198950; 2003-311171

XRXPX Acc No: N2003-211740

Data communication method for Internet-based applications, involves transmitting forwarded data to routing device or destination based on configuration of another routing device

Patent Assignee: DORSETT M A (DORS-I); FOSTER M S (FOST-I)

Inventor: DORSETT M A; FOSTER M S

Patent Family ( 1 patents, 1 & countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20020184529	A1	20021205	US 2001286918	P	20010427	200326	B
			US 2001286922	P	20010427		
			US 2001287069	P	20010427		
			US 2001287075	P	20010427		
			US 2001287081	P	20010427		
			US 2001287120	P	20010427		
			US 2001314088	P	20010821		
			US 2001314158	P	20010821		
			US 2001314287	P	20010822		
			US 2002126489	A	20020419		

Priority Applications (no., kind, date): US 2001286918 P 20010427; US 2001286922 P 20010427; US 2001287069 P 20010427; US 2001287075 P 20010427; US 2001287081 P 20010427; US 2001287120 P 20010427; US 2001314088 P 20010821; US 2001314158 P 20010821; US 2001314287 P 20010822; US 2002126489 A 20020419

Patent Details					
Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 20020184529	A1	EN	58	29	Related to Provisional US 2001286918
					Related to Provisional US 2001286922
					Related to Provisional US 2001287069
					Related to Provisional US 2001287075
					Related to Provisional US 2001287081
					Related to Provisional US 2001287120
					Related to Provisional US 2001314088
					Related to Provisional US 2001314158
					Related to Provisional US 2001314287

Alerting Abstract US A1

**NOVELTY** - Registration request is transmitted from a source to a network manager in response to communication data, for receiving a transmittal virtual identifier. The data is transmitted to a routing device along with the virtual identifier for receiving forwarded data that is transmitted to next routing device or a destination along the communication path based on the configuration of the routing device.  
**DESCRIPTION - INDEPENDENT CLAIMS** are included for the following:

1. computer-readable medium storing data communication program; and
2. computing system.

**USE** - For communicating data between source and destination through Internet for Internet-based application such as e-commerce, e-mail, electronic file transfer and online interactive applications.

**ADVANTAGE** - The data communication is efficiently performed from source to destination in an appropriate manner using the virtual identifier.

**DESCRIPTION OF DRAWINGS** - The figure shows a flowchart explaining the data communication process.

7/5/19 (Item 19 from file: 350)  
DIALOG(R)File 350: Derwent WPIX  
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0012495970 & & Drawing available

WPI Acc no: 2002-443484/200247

Related WPI Acc No: 2000-061755

XRPX Acc No: N2002-349417

Network management method e.g. for local area network, involves propagating HTML document concerning network management function, from agent to computer in format understandable by browser

Patent Assignee: DOAN D H (DOAN-I); LEONG L Y K (LEON-I); NORTEL NETWORKS LTD (NELE)

Inventor: DOAN D H; LEONG L Y K

Patent Family (2 patents, 1 & countries)							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20020046268	A1	20020418	US 1997901198	A	19970728	200247	B
			US 1999405824	A	19990924		
US 6393475	B1	20020521	US 1999405824	A	19990924	200247	E

Priority Applications (no., kind, date): US 1997901198 A 19970728; US 1999405824 A 19990924

Patent Details					
Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 20020046268	A1	EN	28	17	Continuation of application US 1997901198
					Continuation of patent US 5996010

Alerting Abstract US A1

NOVELTY - A network management function relating to a network device (32) such as router, hub is performed. A HTML document concerning the management function, is propagated from a network management agent (30) to the computers (42,44), in a format understandable by the browser.

DESCRIPTION - An INDEPENDENT CLAIM is included for recorded medium storing network management program.

USE - For managing networks e.g. local area network (LAN), wide area network (WAN).

ADVANTAGE - The agent allows the client to directly and effectively access the network management functions using an easily understandable HTML language, and the need for a proxy agent is eliminated.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the network device with network management agent, connected to remote devices through Internet/intranet.

30 Network management agent

32 Network device

42,44 Computers

10/5/4 (Item 4 from file: 350)

DIALOG(R)File 350: Derwent WPIX

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0013679976 & & Drawing available

WPI Acc no: 2003-776593/200373

Related WPI Acc No: 2002-617133; 2002-617138; 2002-655309; 2002-665187; 2003-863335; 2006-171379; 2006-171380; 2006-298704; 2007-726979; 2007-776763; 2007-776764; 2008-E46058

XRPX Acc No: N2003-622223

Network device monitoring method e.g. for routers, involves associating status indicator with event notification of network device, and monitoring status indicator for determining change of state

Patent Assignee: INTELLIDINE INC (INTE-N); SCHENK J A (SCHE-I); TINDAL G (TIND-I)

Inventor: SCHENK J A; TINDAL G

Patent Family (4 patents, 96 & countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20020069271	A1	20020606	US 2000730863	A	20001206	200373	B
AU 200233954	A	20020618	AU 200233954	A	20011205	200373	E
WO 2002047333	A2	20020613	WO 2001US45671	A	20011205	200373	E
AU 2002233954	A8	20051020	AU 2002233954	A	20011205	200615	E

Priority Applications (no., kind, date): US 2000730863 A 20001206

Patent Details					
Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 20020069271	A1	EN	15	7	
AU 200233954	A	EN			Based on OPI patent WO 2002047333
WO 2002047333	A2	EN			
National Designated States, Original	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW				
Regional Designated States, Original	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW				
AU 2002233954	A8	EN			Based on OPI patent WO 2002047333

Alerting Abstract US A1

NOVELTY - An event notification originating from any network device, is received and placed on an event queue. A status indicator comprising various states, is associated with the received event notification. The status indicator is monitored for determining change of state, by judging whether the elapsed time between the placement of event notification in the queue and the current time, exceeds a threshold value.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. apparatus for management event notification generated by network device; and
2. article manufacture comprising recorded medium for storing network device monitoring program.

**USE** - For configuration and management of network resources or devices e.g. routers and optical devices.  
**ADVANTAGE** - The event of network device is monitored and managed irrespective of the device type.  
**DESCRIPTION OF DRAWINGS** - The figure shows the flowchart explaining managing of events of network devices.

## FULL-TEXT PATENTS

12/3K/7 (Item 7 from file: 348)  
DIALOG(R)file 348: EUROPEAN PATENTS  
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01179586

A technique for detecting leaky points within a network protocol domain  
Technik fur Detektion von undichter Stellen im Bereich von Netzwerkprotokoll  
Technique de detection de points non etanches dans le domaine d'un protocole de reseau

Patent Assignee:

- Nortel Networks Limited; (3029040)  
World Trade Center of Montreal, 380 St. Antoine Street West, 8th floor; Montreal, Quebec H2Y 3Y4; (CA)  
(Applicant designated States: all)

Inventor:

- Yunzhou,Li  
351 Pawtucket Boulevard Unit 7.; Lowell,MA 01854; (US)
- NG,Billy,C  
1722 North Shore Drive; Revere,MA 02151; (US)

Legal Representative:

- Christophers, Rachel Alder et al (91501)  
Sommerville & Rushton, Business Link Building, 45 Grosvenor Road; St. Albans, Hertfordshire AL1 3AW; (GB)

	Country	Number	Kind	Date
Patent	EP	1028567	A2	20000816 (Basic)
	EP	1028567	A3	20020703
Application	EP	2000301061		20000210
Priorities	US	248803		19990211

Designated States:  
DE; FR; GB;

Extended Designated States:  
AL; LT; LV; MK; RO; SI;

International Patent Class (V7): H04L-012/26; H04L-012/56Abstract Word Count: 141

NOTE: NONE

NOTE: Figure number on first page: NONE

[Legal Status Type] [Pub. Date] [Kind] [Text]

Language Publication: English

Procedural: English

Application: English

Fulltext Availability	Available Text	Language	Update	Word Count
CLAIMS A	(English)	200033	3578	
SPEC A	(English)	200033	9659	
Total Word Count (Document A) 13237				
Total Word Count (Document B) 0				
Total Word Count (All Documents) 13237				

Specification: ...PBL Probe message to a PBL router in the network protocol domain. If the PBL Prober is a router within the network protocol domain, then the PBL Prober transmits the PBL Probe message to each of its neighboring routers. A preferred PBL router discovers its neighboring router(s) using a router solicitation/advertisement mechanism described in the Internet Engineering Task Force (IETF) Request For Comments (RFC) document number 1256 entitled ICMP Router Discovery Messages (September 1991), incorporated herein by reference in its entirety.

After transmitting the PBL Probe message over one or more network interfaces, the PBL Prober monitors each network interface for a PBL Probe Acknowledgment message. As described above, each receiving PBL router acknowledges receipt of the PBL Probe message by transmitting a PBL Probe Acknowledgment message back to the PBL Probe message transmitter over the incoming interface. If the PBL Prober fails to receive a PBL Probe Acknowledgment message over a particular network interface within a predetermined period of time, then that...228, the PBL router first determines the outgoing network interface(s) over which the PBL Probe message is to be forwarded, in step 242. The PBL router then decrements the Current TTL Indicator in the PBL Probe message, in step 244, and transmits the PBL Probe message to its neighboring routers over each outgoing network interface, in step 246. The PBL router then starts a timer, in step 248, and monitors each outgoing network interface for a PBL Probe Acknowledgment message, in step 250. The PBL Prober continues to monitor for the PBL Probe Acknowledgment messages until the timer expires (YES in step 252). For each PBL Probe Acknowledgment message received during the timer period (YES in step 254), the PBL router marks...Probe message from the PBL Prober router P0, the PBL router P3 sends a PBL Probe Acknowledgment message to the PBL Prober router P0. The PBL router P3 then propagates the... ...R1. Specifically, the PBL router P3 decrements the Current TTL Indicator in the PBL Probe message, resulting in a Current TTL Indicator value of two (2), and forwards the PBL Probe message to the PBL router P4 and non-PBL router R1. The PBL router P3 then monitors the outgoing network interfaces for PBL Probe Acknowledgment messages from the PBL router P4 and non-PBL router R1. Of course, the PBL router P3 does not receive a PBL Probe Acknowledgment message from the non-PBL router R1, since the non-PBL router R1 does not support.... 4

Address List Length = 1

Address List = 200.10.10.1

Upon receiving the PBL Probe message from the PBL router P3, the PBL router P4 sends a PBL Probe Acknowledgment.... ...R1. Specifically, the PBL router P4 decrements the Current TTL Indicator in the PBL Probe message, resulting in a Current TTL Indicator value of one (1), and forwards the PBL Probe message to the PBL router P7 and non-PBL router R1. The PBL router P4 then monitors the outgoing

network interfaces for PBL Probe Acknowledgment messages from the PBL router P7 and non-PBL router R1. Of course, the PBL router P4 does not receive a PBL Probe Acknowledgment message from the non-PBL router R1, since the non-PBL router R1 does not support...

NPL

13/5/3 (Item 1 from file: 95)  
DIALOG(R)File 95: TEME-Technology & Management  
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01672883 20020904293  
Mobility management in third-generation all-IP networks

Ciussi, FM; Khotimsky, DA; Krishnan, S  
Lucent Technol. Bell Labs, NJ, USA  
IEEE Communications Magazine, v40, n9, pp124-135 , 2002  
Document type: journal article Language: English  
Record type: Abstract  
ISSN: 0163-6804

**Abstract:**

It is now widely recognized that using IP as the foundation for next-generation mobile networks makes strong economic and technical sense, since it takes advantage of the ubiquitous installed IP infrastructure, capitalizes on the IETF standardization process, and benefits from both existing and emerging IP-related technologies and services. The large-scale support of data services and their integration with legacy services are the common objectives of all wireless efforts termed third generation (3G) and beyond. In these all-IP wireless networks, IP can be deployed in two modes: the transport mode and the native mode. As we show in this article, this duality in the use of IP has a significant impact on network efficiency and performance. It is the extended native use of IP in the terrestrial segment of a wireless operator's domain that more readily allows for building a converged network with multiple access technologies. We then discuss the different levels of mobility in the all-IP network. In particular, our focus is on micromobility, and on the issue of seamless localized mobility within the converged network. After reviewing the mobility schemes that have emerged in previous years, we describe a hierarchical mobility management scheme based on multiprotocol label switching (MPLS). The scheme employs an enhanced type of MPLS routers, called label edge mobility agents, and is scalable, efficient, and flexible. It directly inherits the noted capabilities of MPLS in terms of support of QoS, traffic engineering, advanced IP services, and fast restoration. This scheme does not use nodes that are specific to any given wireless technology, and is well suited for gradual deployment.

Descriptors: CELLULAR RADIO; COMPUTER NETWORK MANAGEMENT; DATA COMMUNICATION; MULTIPLE ACCESS; PACKET SWITCHING; NETWORK ROUTING; COMMUNICATION PROTOCOLS; SERVICE; EFFECTIVENESS

Identifiers: INTERNET PROTOKOLL; MOBILNETZ; DATENDIENST; LEGALE DIENSTLEISTUNG; NETZWERKLEISTUNGSFAEHIGKEIT; MEHRPROTOKOLLZIELBESTIMMUNGSVERMITTLUNG; NETZWERK; Zellularfunk; Rechnernetzmanagement

17/5/4 (Item 1 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

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0013828017 E.I. COMPENDEX No: 1997223596359

Computers don't sweat or performance metrics in the distributed computing environment

Quigley, J.P.

Corresp. Author/Affil: Quigley, J.P.: Consolidated Edison Compay of New, York, New York, United States

Editor(s): Anon

Conference Title: Proceedings of the 1995 21st International Conference for the Resource Management & Performance Evaluation of Enterprise Computing Systems, CMG. Part 2 (of 2)

Conference Location: Nashville, TN, USA Conference Date: 19951203-19951208

E.I. Conference No.: 46204

CMG Proceedings ( CMG Proc ) 1995 2/- (720-730)

Publication Date: 19951201

Publisher: CMG

CODEN: CMPRE

Document Type: Conference Paper; Conference Proceeding Record Type: Abstract

Treatment: A; (Applications); T; (Theoretical); X; (Experimental)

Language: English Summary Language: English

Number of References: 6

This paper explores the performance metrics generated by the intelligent components of today's distributed computing environment. Data sources, collection techniques, and the metrics themselves are discussed. These metrics drive the real time monitors and serve as input to analysis of performance trends and capacity plans. The paper does not get into great depth on analysis of the metrics. Instead, it concentrates on mechanics by serving as a tutorial on how to go about collecting the data, and what you can expect it to look like when it arrives. Specifically, it covers metrics available from LAN servers and SNMP-capable devices such as routers, bridges, and concentrators. Examples are taken from Sun Microsystems's SunNet Manager and Microsoft's Windows/NT Advanced server.

Descriptors: Computer operating systems; Data acquisition; Database systems; Local area networks;

\*Distributed computer systems

Identifiers: Performance metrics

Classification Codes:

722.4 (Digital Computers & Systems)

723.1 (Computer Programming)

723.3 (Database Systems)

((router <near/10> (network <near/2> (monitor\* or manag\*))) or  
snmp) <near/10> (id or identifier or indicator) <ln> pdlidata) <and>  
(pyr >= 1913 <and> pyr <= 2003)

0